

Year 5: Space

SPHERICAL BODIES

How Many Planets Are There?

There are 8 planets in the solar system and several dwarf planets.



As objects get more and more massive, gravity forces them into a spherical shape. All planets and stars are (roughly) spherical because of this—even Earth! Notice how all 8 planets in our solar system are roughly the same shape.

PHASES OF THE MOON



As you will remember from Year 3, the Moon does not emit its own light; it reflects it from the Sun. Depending on where it is in its orbit around the Earth, the Earth can block some of this light. This gives us a cycle of phases of the moon which repeat every four weeks.

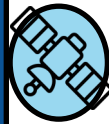
KEY VOCABULARY:



Planet: spherical bodies large enough for their gravitational field to dominate the local region of space.



Solar System: Our own star, the Sun, along with all the planets, moons, and other objects that orbit around it.



Satellite: Objects that orbit around a planet. Some satellites are natural, like the Moon, and some are human-made, like the ones we send into space.



Heliocentric: All planets in a solar system orbit around a central star. In our case, this is the Sun.



Orbit: The path that a planet or other object is held in by the gravitational force of the body it is going around.



Spherical: Shaped like a sphere. A round 3D shape where every point on the surface is the same distance from the centre.

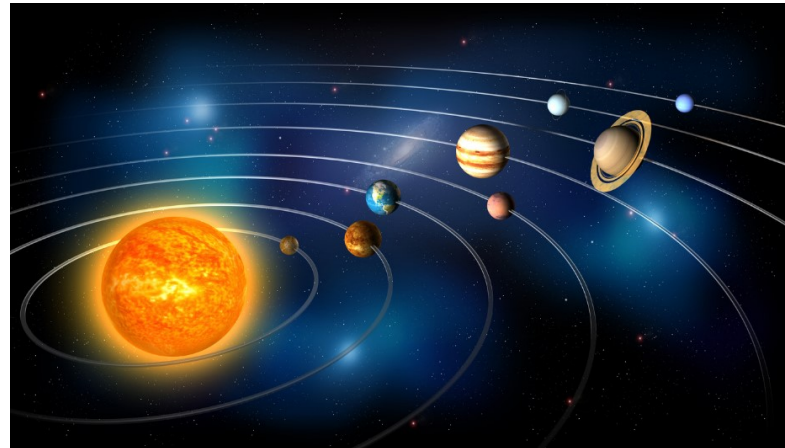


Gravity: A force that pulls objects towards each other. The more massive something is, the more gravity it has.



Lunar Phase: the portion of the Moon that is visible from Earth due to the Sun's light.

Heliocentric Solar System



For a long time, people believed that the Earth was the centre of the universe. Now we know that it is not at the centre of the universe, our galaxy or even our own solar system. All of the planets in our solar system orbit around the Sun in the middle.